



BY E-MAIL AND INTERNATIONAL COURIER

October 4, 2018

BBPOS Group
Room 1903-04, 19/F, Tower 2, Nina Tower
8 Yeung Uk Road, Tsuen Wan
New Territories
Hong Kong

Attention: Alex Choi, President and Chief Executive Officer
Ben Lo, Chairman and Co-Founder

Re: Lawsuit by MobilePay LLC Relating to U.S. Patent No. 9,800,706

Gentlemen:

I write regarding the Engineering Development and License Agreement made as of May 4, 2010, as amended on August 15, 2011 (the "Agreement"), between BBPOS Limited ("BBPOS") and Ingenico Inc., successor by merger to ROAM Data, Inc. ("Ingenico").

Ingenico has learned that MobilePay LLC has filed suit against PayPal, Inc., alleging that a PayPal card-reader infringes U.S. Patent No. 9,800,706 that is owned by MobilePay LLC. I enclose a copy of the Complaint MobilePay filed on September 28, 2018, in US federal district court for the Western District of Texas. The card-reader referenced in the Complaint is sold to Ingenico by BBPOS pursuant to the Agreement.

Ingenico hereby notifies BBPOS of BBPOS's duty to indemnify and hold harmless Ingenico pursuant to Section 3.18 of the Agreement, and pursuant to the representations and warranties made by BBPOS in Sections 3.9 and 3.10 of the Agreement.

Please contact our outside counsel to confirm that BBPOS acknowledges these indemnification duties and responsibilities and so our attorneys can discuss the matter further. Our outside counsel is:

Kerry Timbers
Sunstein Kann Murphy & Timbers LLP
125 Summer Street
Boston, MA 02110-1618
Tel: (617) 443-9292
ktimbers@sunsteinlaw.com

Very truly yours,

A handwritten signature in black ink, appearing to read "Ward", followed by a long horizontal flourish.

Ward D. Hewins
Vice President & General Counsel
Ingenico North America

Enclosure

www.ingenico.us
101 Federal Street, Suite 700, Boston, MA 02110

**UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TEXAS
WACO DIVISION**

MOBILEPAY LLC,

Plaintiff

v.

PAYPAL, INC.,

Defendant

Case No. 6:18-cv-287

JURY TRIAL DEMANDED

COMPLAINT FOR PATENT INFRINGEMENT

Plaintiff MobilePay LLC (“Plaintiff” or “MobilePay”) hereby asserts the following claims for patent infringement against Defendant PayPal, Inc. (“Defendant” or “PayPal”), and alleges, on information and belief, as follows:

THE PARTIES

1. MobilePay is a limited liability company organized and existing under the laws of the Texas with its principal place of business at 17330 Preston Road, Ste 200, Dallas, Texas 75252.
2. Defendant is a Delaware corporation with its principal place of business located at 2211 North First Street, San Jose, California, 95121.

JURISDICTION AND VENUE

3. This action arises under the patent laws of the United States, 35 U.S.C. § 1, *et seq.* This Court has subject matter jurisdiction under 28 U.S.C. §§ 1331 and 1338(a).
4. Defendant has committed acts of infringement in this judicial district.
5. Defendant has a regular and established place of business in this judicial district at 7700 West Parmer Lane, Building D, Suite 300, Austin, Texas 78729.

6. On information and belief, the Court has personal jurisdiction over Defendant because Defendant has committed, and continues to commit, acts of infringement in the state of Texas, has conducted business in the state of Texas, and/or has engaged in continuous and systematic activities in the state of Texas.

7. On information and belief, Defendant's instrumentalities that are alleged herein to infringe were and continue to be used, imported, offered for sale, and/or sold in the Western District of Texas.

8. Venue is proper in the Western District of Texas pursuant to 28 U.S.C. § 11400(b).

PAYPAL

9. Upon information and belief, Defendant PayPal makes, uses, imports, sells, and/or offers for sale the PayPal Mobile Card Reader. The PayPal Mobile Card Reader is described by the PayPal website (www.paypal.com) and is exemplified by the following references:

- "PayPal Mobile Card Reader - PayPal Here - US" ("**Mobile Card Reader**"), *available at* <https://us.paypal-here.com/paypal-mobile-card-reader/> (last accessed September 18, 2018);
- "EFM32 Tiny Gecko Series 1 Family EFM32TG11 Family Data Sheet ("**EFM32**"), Preliminary Rev. 0.5, *available at* <https://www.silabs.com/documents/public/data-sheets/efm32tg11-datasheet.pdf> (last accessed September 18, 2018);
- "audio - How does the phone detect if 3.5 mm jack circuit is closed? - Electrical Engineering Stack Exchange" ("**3.5 mm jack circuit**"), *available at* <https://electronics.stackexchange.com/questions/95575/how-does-the-phone-detect-if-3-5-mm-jack-circuit-is-closed> (last accessed September 18, 2018);
- "My PayPal Here Card Reader is not working. Can you help me?" ("**Card Reader**"), *available at* <https://www.paypal.com/us/smarthelp/article/my-paypal-here-card-reader-is-not-working.-can-you-help-me-faq3429> (last accessed September 18, 2018);
- "PayPal Here - POS, Credit Card Reader - Apps on Google Play" ("**PayPal Here**"), *available at* https://play.google.com/store/apps/details?id=com.paypal.here&hl=en_US (last accessed September 18, 2018);

- Mobile Point of Scam: Attacking the Square Reader” (“**Blackhat**”), available at <https://www.blackhat.com/docs/us-15/materials/us-15-Mellen-Mobile-Point-Of-Scam-Attacking-The-Square-Reader-wp.pdf> (last accessed September 18, 2018); and
- “PayPal Security: Email confirmations, Encryption and other protections” (“**PayPal Security**”), available at <https://www.paypal.com/us/webapps/mpp/security/security-protections> (last accessed September 18, 2018).

COUNT I

(Infringement of U.S. Patent No. 9,800,706)

10. Plaintiff incorporates paragraphs 1-9 herein by reference.
11. Plaintiff is the owner, by assignment, of U.S. Patent No. 9,800,706 (the “’706 Patent”), entitled ELECTRONIC DEVICE INPUT/OUTPUT SYSTEM AND METHOD, which issued on October 24, 2017. A copy of the ’706 Patent is attached as **Exhibit A**.
12. The ’706 Patent is valid, enforceable, and was duly issued in full compliance with Title 35 of the United States Code.
13. Upon information and belief, Defendant has infringed and continues to infringe one or more claims, including Claim 1, of the ’706 Patent by making, using, importing, selling, and/or, offering for sale the PayPal Mobile Card Reader. Defendant has infringed and continues to infringe the ’706 Patent either directly or through the acts of contributory infringement or inducement in violation of 35 U.S.C. § 271. Defendant has been on notice of the ’706 Patent at least as early as the date it received service of this complaint.
14. Defendant sells, offers to sell, and/or uses the PayPal Mobile Card Reader, and any similar products, which infringe at least Claim 1 of the ’706 Patent. The PayPal Mobile Card Reader is designed to connect to and work with a mobile device. (collectively “**the MCR System**”).
15. Claim 1 of the ’706 Patent recites:

1. A system for coupling a credit card reader to a mobile device, the system comprising:

a hardware component that connects to the mobile device and the credit card reader, the hardware component including:

- a first mechanism configured to receive data provided by the credit card reader;
- a communication controller for buffering the data received from the credit card reader prior to conversion by a first circuit;
- the first circuit configured to convert the data to an analog audio signal;
- a connector to couple the hardware component to an audio input port of the mobile device, wherein:

- the connector bridges a microphone pin of the audio input port such that the mobile device detects a presence of the connector in the audio input port;
 - and

- the connector provides an audio communication between the hardware component and the mobile device and communicates the analog audio signal from the hardware component to the mobile device;

- a second mechanism on the mobile device configured to receive the analog audio signal and convert the analog audio signal into binary data; and

- a third mechanism on the mobile device configured to upload the binary data to a cloud service for decoding.

16. The MCR System is a system for coupling a credit card reader to a mobile device. *See, e.g., Mobile Card Reader.* An example is illustrated below:

The image shows the "PayPal Here" logo, which consists of the words "PayPal Here." in a white, sans-serif font, centered within a dark rectangular background with a thin red border.



Compatibility: Compatible with most iOS®, Android, and Windows mobile phones and tablets. [Check Compatibility.](#)

Weight: 2.45 ounces

Connection Type: Plugs into the audio jack of your mobile phone or tablet.

Payment Types:



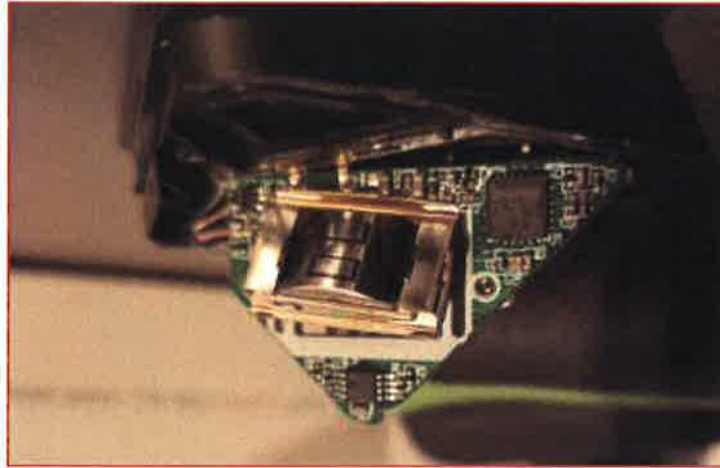
Accepts payments from credit and debit magnetic stripe cards.


Mobile Card Reader.

17. The MCR System is a hardware component that connects to a mobile device and a credit card reader. An example is illustrated below:



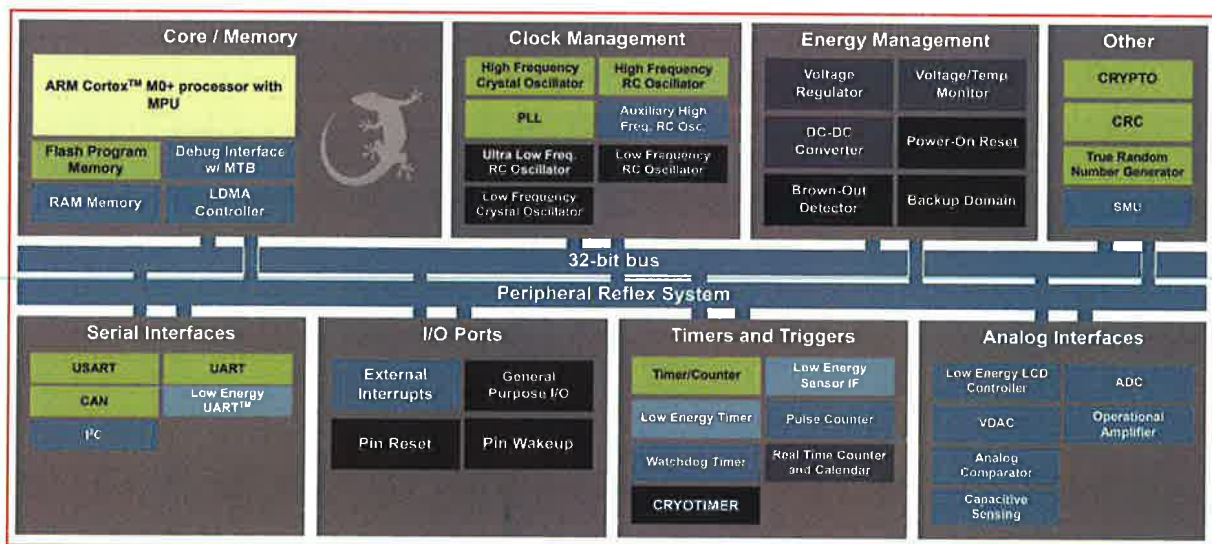
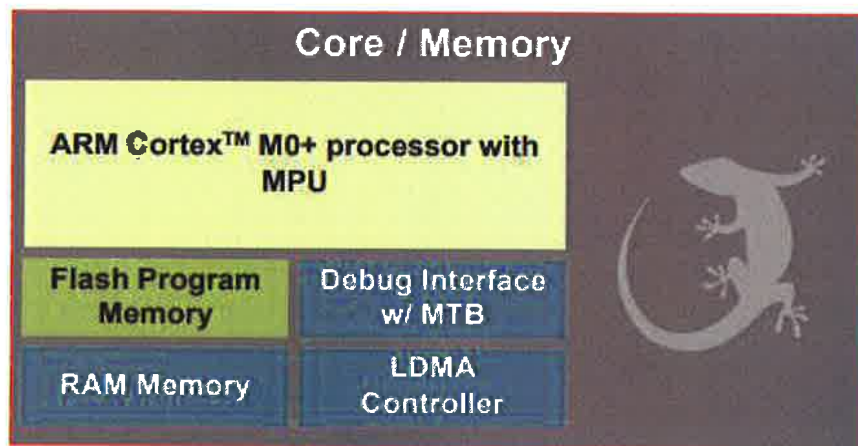
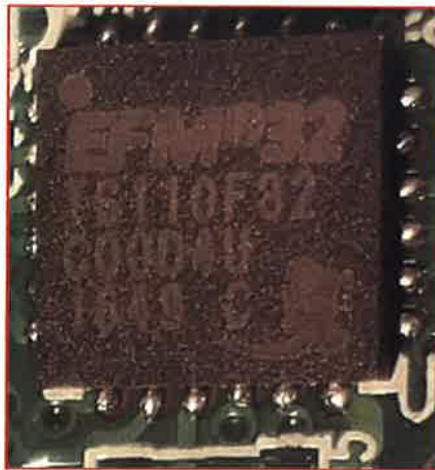
18. The MCR System includes a first mechanism configured to receive data provided by the credit card reader. *See, e.g., Mobile Card Reader.* An example is illustrated below:



| | |
|-------------------------|--|
| Compatibility: | Compatible with most iOS®, Android, and Windows mobile phones and tablets. Check Compatibility |
| Weight: | 2.45 ounces |
| Connection Type: | Plugs into the audio jack of your mobile phone or tablet. |
| Payment Types: |  Accepts payments from credit and debit magnetic stripe cards. |

Mobile Card Reader.

19. The MCR System includes a communication controller for buffering the data received from the credit card reader prior to conversion by a first circuit. *See, e.g., EFM32*. An example is illustrated below:



EFM32 at p. 1.

- **Up to 128 kB flash program memory**
- **Up to 32 kB RAM data memory**

EFM32 at p. 2.

20. The first circuit in the MCR System is configured to convert the data to an analog audio signal. *See, e.g., EFM32.* An example is illustrated below:

- **2 × 12-bit 500 ksamples/s Digital to Analog Converter (VDAC)**

EFM32 at p. 2.

3.8.5 Digital to Analog Converter (VDAC)

The Digital to Analog Converter (VDAC) can convert a digital value to an analog output voltage. The VDAC is a fully differential, 500 ksps, 12-bit converter. The opamps are used in conjunction with the VDAC, to provide output buffering. One opamp is used per single-ended channel, or two opamps are used to provide differential outputs. The VDAC may be used for a number of different applications such as sensor interfaces or sound output. The VDAC can generate high-resolution analog signals while the MCU is operating at low frequencies and with low total power consumption. Using DMA and a timer, the VDAC can be used to generate waveforms without any CPU intervention. The VDAC is available in all energy modes down to and including EM3.

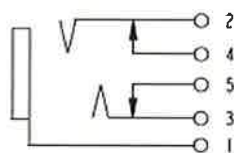
EFM32 at p. 15.

21. The MCR System includes a 3.5 mm headphone connector to couple the hardware component to an audio input port of the mobile device. An example is illustrated below:



22. The connector in the MCR System bridges a microphone pin of the audio input port such that the mobile device detects a presence of the connector in the audio input port. *See, e.g., 3.5 mm jack circuit.* An example is illustrated below:

Headphone jacks have extra contacts inside, which act as switches. The the drawing below, pins 4 and 5 are intended for sensing that the plug was inserted. They are not intended for audio signal. When the plug is not present, the switch, which are formed by 2 & 4 and 3 & 5, are closed. When the plug is inserted, these switches are open. The plug flexes 2 and 3 slightly, and they break contact with 4 and 5. You could insert a 3.5mm plastic rod [a dummy] into the jack, which will open the contacts, and the phone might think that earphones are plugged in.



SCHEMATIC

3.5 mm jack circuit.

23. The connector in the MCR System provides an audio communication between the hardware component and the mobile device and communicates the analog audio signal from the hardware component to the mobile device. *See, e.g., Card Reader.* An example is illustrated below:

If your PayPal mobile card reader isn't working, here are some things to try:

- Make sure the PayPal Here mobile **card reader is compatible** with your phone.
- Launch the PayPal Here app before using the mobile card reader.
- Make sure the mobile card reader is firmly plugged into the audio jack, and that the phone case isn't in the way.
- Slide the front right corner of the reader down so that it locks onto your phone.
- Make sure the volume is turned all the way up, the mic is turned on, and your phone's Location services setting is turned on.
- Swipe cards slowly, in one continuous motion.

Card Reader.

24. The MCR System includes a second mechanism on the mobile device configured to receive the analog audio signal and convert the analog audio signal into binary data. *See, e.g., PayPal Here and Blackhat*. An example is illustrated below:

SECURE PAYMENTS:

PayPal Here uses an encrypted card reader, backed by our best-in-class risk-management and fraud protection. All payments go right into your account for secure, reliable, and easy transaction processing.

PayPal Here.

The initial models of the Square Reader, models S1 and S2, are quite simple and do not contain any integrated circuitry. The devices consist of a magnetic head connected to a headphone jack with a microphone output, which is sufficient to read a magnetic stripe. By sampling a phone's microphone input fast enough, an application is able to read the small voltages produced by the magnetic head and, by examining the zero-crossings in the signal, decode them into unencrypted credit card information.

Later models of the Square Reader, models S3 and S4, contain integrated circuitry that can read and modify the signal before transmitting it to the phone in order to provide encryption and amplification. However, the signal is still transmitted as a varying voltage, recorded by an app, and decoded into binary digits that represent encrypted or unencrypted data. In the case of encrypted data, the encrypted bits can then be sent to external servers for decryption.

Blackhat at p. 2.

We have examined the security of the Square Reader, one of many mobile card-reading devices designed to allow merchants to more easily enter the market of processing transactions. In our analysis, we have demonstrated a number of vulnerabilities in the Square Reader, including unenforced deprecation of old hardware, allowance of out-of-order transactions, and insufficient tamper-proof hardware features. We suggest that similar attacks could possibly be performed on other mobile point-of-sale competing systems such as Intuit GoPayments and PayPal Here, which utilize similar end-to-end encryption [2][26]. We emphasize that mobile card-reading devices face additional challenges beyond traditional point-of-sale hardware, given that they are smaller, cheaper, and compatible with commodity hardware. These challenges are manifest in the vulnerabilities that we have identified and in the responses we received to our disclosure reports outlined in Section VII.

Blackhat at p. 7.

25. The MCR System includes a third mechanism on the mobile device configured to upload the binary data to a cloud service for decoding. *See, e.g., PayPal Security*. An example is illustrated below:

Data encryption

End-to-end encryption is an important element in helping to keep your data and PayPal transactions secure. We employ a team of security and compliance experts dedicated to implementing and educating customers on industry standards.

Some of the methods we use include, but are not limited to, the following:

TLS Connection

When you register or log into PayPal from your computer or mobile device, we make sure you're connecting with TLS 1.0 or higher and only make HTTPS connections (HSTS). Strong TLS configurations are the current industry standard for trusted communication channels and allow your information to transmit across the Internet in a secure manner. Only allowing HTTPS connections helps to reduce your susceptibility to some passive and active attacks.

Key Pinning

When you access PayPal via the iOS and Android apps we implement key pinning. Key pinning ensures that when the TLS connection is established by your mobile device it connects only to a true PayPal server. This prevents situations where you launch the app, expecting to connect to PayPal and a PayPal imposter intercepts your connection request and pretends to be us.

Data Protection

We comply with stringent requirements for data protection while in transit and at rest such as PCI-DSS. In addition to industry and regulatory encryption requirements, PayPal's Information Security Policies and Controls are reviewed by independent third parties to the following industry standards and guidelines: American Institute of Certified Public Accountants SSAE16 SOC1, AT101 SOC2, Sarbanes-Oxley.

PayPal Security.

26. Plaintiff has been damaged by Defendant's infringement of the '706 Patent.

PRAYER FOR RELIEF

WHEREFORE, Plaintiff respectfully requests the Court enter judgment against Defendant:

1. declaring that the Defendant has infringed the '706 Patent;
2. awarding Plaintiff its damages suffered as a result of Defendant's infringement of the '706 Patent;

3. awarding Plaintiff its costs, attorneys' fees, expenses, and interest; and
4. granting Plaintiff such further relief as the Court finds appropriate.

JURY DEMAND

Plaintiff demands trial by jury, Under Fed. R. Civ. P. 38.

Dated: September 28, 2018

Respectfully Submitted

/s/ Raymond W. Mort, III

Raymond W. Mort, III

Texas State Bar No. 00791308

raymort@austinlaw.com

THE MORT LAW FIRM, PLLC

106 E. Sixth Street, Suite 900

Austin, Texas 78701

Tel/Fax: (512) 865-7950

ATTORNEYS FOR PLAINTIFF



BY E-MAIL AND INTERNATIONAL COURIER

October 22, 2018

BBPOS Group
Room 1903-04, 19/F, Tower 2, Nina Tower
8 Yeung Uk Road, Tsuen Wan
New Territories
Hong Kong

Attention: Alex Choi, President and Chief Executive Officer
Ben Lo, Chairman and Co-Founder

Re: Letters from Blackbird Technologies relating to Audio Jack Card-Reader Patent

Gentlemen:

I write regarding the Engineering Development and License Agreement made as of May 4, 2010, as amended on August 15, 2011 (the "Agreement"), between BBPOS Limited ("BBPOS") and Ingenico Inc., successor by merger to ROAM Data, Inc. ("Ingenico").

Ingenico has been notified that Blackbird Technologies has sent letters to Blackbaud, Inc. and to Total Merchant Services, Inc. ("TMS") and TMS's parent company, North American Bancard, LLC ("NAB"), alleging that a mobile card reader sold by each of those companies may infringe U.S. Patent No. 9,679,286. Copies of the letters are enclosed.

The device cited in these letters is provided to Ingenico by BBPOS pursuant to the Agreement. Ingenico hereby notifies you of BBPOS's duty to indemnify and hold harmless Ingenico pursuant to Section 3.18 of the Agreement, and pursuant to the representations and warranties BBPOS made in Sections 3.9 and 3.10 of the Agreement.

Please contact Ingenico's outside counsel to confirm that BBPOS acknowledges these indemnification duties and responsibilities and so our attorneys can discuss the matter further. Our outside counsel is:

Kerry Timbers
Sunstein Kann Murphy & Timbers LLP
125 Summer Street
Boston, MA 02110-1618
Tel: (617) 443-9292
ktimbers@sunsteinlaw.com

Very truly yours,

A handwritten signature in blue ink, appearing to read "Ward D. Hewins", with a long, sweeping horizontal line extending to the right.

Ward D. Hewins
Vice President & General Counsel
Ingenico North America

Enclosures

Moore & Van Allen

VIA U.S. MAIL

August 6, 2018

ROAM Data, Inc.
c/o Mr. Jacques Guerin
Chief Executive Officer
Ingenico Inc.
3025 Windward Plaza
Suite 600
Alpharetta, GA 30005

Henry B. Ward, III
Attorney at Law

T 704 331 1027
F 704 339 5853
henryward@mvalaw.com

Moore & Van Allen PLLC

Suite 4700
100 North Tryon Street
Charlotte, NC 28202-4003

Re: Notice of Indemnity Demand Pursuant to ROAMswipe API Reseller Agreement between ROAM Data Inc. and Blackbaud, Inc.

Dear Mr. Guerin:

Moore & Van Allen PLLC represents Blackbaud, Inc. ("Blackbaud") in certain of its legal matters. Reference is hereby made to that certain ROAMswipe API Reseller Agreement (the "Agreement") between ROAM Data Inc. ("ROAM") and Blackbaud dated November 30, 2012. It is our understanding that Ingenico Group ("Ingenico") acquired ROAM on around January 2015, and as such, Ingenico is ROAM's successor-in-interest, including for this matter.

Please be advised that Blackbaud received correspondence on June 22, 2018, from Blackbird Technologies ("Blackbird") regarding alleged infringement of U.S. Patent No. 9,679,286 ("the '286 Patent"), entitled "*Methods and Apparatus for Enabling Secure Network-Based Transactions*", by Blackbaud's MobilePay, for which ROAM supplies the mobile card reader ("MCR") hardware and ROAMswipe API under the Agreement. Blackbird's letter indicates that Blackbird has established a tiered licensing program for the '286 Patent. A copy of Blackbird's June 22, 2018 letter is enclosed for your review.

Pursuant to Section 5.1 of the Agreement, ROAM represented and warranted that "all Services and other materials provided by ROAM ... do not and will not knowingly infringe the rights of any third-parties, including, but not limited to, any copyrights, patents, trademarks, trade secrets, contractual or other proprietary rights and that ROAM shall at all times maintain appropriate and necessary licenses, authorities, permissions and rights from any and all service, software, hardware and other third parties it uses in the performance of its obligations under this Agreement."

Furthermore, pursuant to Section 6.1, ROAM agreed "to defend, indemnify, and hold harmless [Blackbaud], its officers, directors, employees, subsidiaries, affiliates, representatives, successors and assigns from and against any and all claims, allegations, suits, damages, losses, expenses, costs, including reasonable attorney's fees, or amounts payable under any judgment, verdict, court order or settlement resulting from the infringement or misappropriation, or alleged infringement or alleged misappropriation, of any third party intellectual property or other rights to the extent that such infringement or misappropriation is attributable to the Services, Work Product, software, and other materials. Should any Product or Services supplied by

Charlotte, NC
Research Triangle Park, NC
Charleston, SC

AC_1360874



BY E-MAIL AND INTERNATIONAL COURIER

October 22, 2018

BBPOS Group
Room 1903-04, 19/F, Tower 2, Nina Tower
8 Yeung Uk Road, Tsuen Wan
New Territories
Hong Kong

Attention: Alex Choi, President and Chief Executive Officer
Ben Lo, Chairman and Co-Founder

Re: Letters from Blackbird Technologies relating to Audio Jack Card-Reader Patent

Gentlemen:

I write regarding the Engineering Development and License Agreement made as of May 4, 2010, as amended on August 15, 2011 (the "Agreement"), between BBPOS Limited ("BBPOS") and Ingenico Inc., successor by merger to ROAM Data, Inc. ("Ingenico").

Ingenico has been notified that Blackbird Technologies has sent letters to Blackbaud, Inc. and to Total Merchant Services, Inc. ("TMS") and TMS's parent company, North American Bancard, LLC ("NAB"), alleging that a mobile card reader sold by each of those companies may infringe U.S. Patent No. 9,679,286. Copies of the letters are enclosed.

The device cited in these letters is provided to Ingenico by BBPOS pursuant to the Agreement. Ingenico hereby notifies you of BBPOS's duty to indemnify and hold harmless Ingenico pursuant to Section 3.18 of the Agreement, and pursuant to the representations and warranties BBPOS made in Sections 3.9 and 3.10 of the Agreement.

Please contact Ingenico's outside counsel to confirm that BBPOS acknowledges these indemnification duties and responsibilities and so our attorneys can discuss the matter further. Our outside counsel is:

Kerry Timbers
Sunstein Kann Murphy & Timbers LLP
125 Summer Street
Boston, MA 02110-1618
Tel: (617) 443-9292
ktimbers@sunsteinlaw.com

Very truly yours,

A handwritten signature in blue ink, appearing to read "Ward D. Hewins", with a long, sweeping horizontal line extending to the right.

Ward D. Hewins
Vice President & General Counsel
Ingenico North America

Enclosures

Mr. Jacques Guerin
August 6, 2018
Page 2

ROAM and used by [Blackbaud] infringe or misappropriate any third party intellectual property or other rights, ROAM will provide to [Blackbaud] at ROAM's cost and expense and in [Blackbaud's] discretion (if possible) either: (a) the right to continue using the Product or Services; (b) a non-infringing equivalent replacement or modification reasonably acceptable to [Blackbaud]; or (c) if the foregoing efforts are unsuccessful, remove such Product or Service and adjust [Blackbaud's] payment obligations accordingly and/or terminate this Agreement and refund all payments related to the Product or Services."

Blackbaud hereby provides notice to ROAM of ROAM's obligation to indemnify Blackbaud against Blackbird's allegations. Under Sections 5.1 and 6.1 of the Agreement, ROAM's indemnification obligations in circumstances such as this one include the defense and/or settlement of Blackbird's claim (which may include negotiating and obtaining any necessary license from Blackbird for the '286 Patent, at ROAM's cost and expense and/or providing a reasonably acceptable non-infringing equivalent replacement or modification).

To avoid any disruption to Blackbaud's business, we request that ROAM confirm in writing by **August 17, 2018**, that ROAM is assuming its indemnity obligations under the Agreement. Should you have any questions in the meantime regarding this matter, please contact us.

Sincerely,

/hbw/

Henry B. Ward, III

Enclosures



June 22, 2018

Chris Freeman
VP and Head of Litigation

VIA U.S. Mail

Blackbaud
ATTN: Jon Olson, General Counsel
2000 Daniel Island Drive
Charleston, SC 29492-7541

617.307.7116 t
617.307.7103 f
cfreeman@blackbird-tech.com

Re: U.S. Patent No. 9,679,286

Dear Mr. Olson

I write to initiate licensing discussions regarding U.S. Patent No. 9,679,286 (the "'286 patent"), which is owned by Blackbird Technologies.

The '286 patent is generally directed to methods and apparatus for enabling secure network-based transactions, and, in particular, methods and apparatus that use what is now commonly known as an "audio jack card reader." The '286 patent has a September 2005 priority date, which we note predates the earliest audio jack card readers in the industry.

It appears that Blackbaud's MobilePay product and software may practice at least claim 1 of the '286 patent. Specifically, we believe that the MobilePay product has "an input interface configured to accept transaction data from an output interface of a transaction card, and an output pin, as a part of the card reader, configured to directly connect the card reader to a microphone port of a smart telephone, the card reader providing the transaction data accepted from the output interface of the transaction card to the output pin, and hence to the microphone port, as an analog variable voltage audio signal" and that the accompanying App contains "coded instructions stored in a non-transitory medium of a first Internet-connected server, and accessible by a user of the card reader," which "when executed on a processor in the smart telephone, convert the analog variable voltage audio signal received at the microphone port to the transaction data as digital data, establish direct data exchange between the smart telephone and a second Internet-connected server and facilitate transactions by a financial institution, or purchases from an online-merchant, using the transaction data."

Blackbird has established a tiered licensing program for the '286 patent based on an institution's annual card reader-based credit card processing volume. If Blackbaud is interested in pursuing licensing discussions with Blackbird Technologies, we will be happy to enter into a non-disclosure agreement to allow for the exchange of confidential information to facilitate the licensing discussions.

We at Blackbird Technologies are committed to protecting our intellectual property and believe that we will be able to reach an agreement that will allow Blackbaud to continue to use this valuable technology. Please let us know if you are interested in pursuing licensing discussions at your earliest convenience.

Regards,

Christopher Freeman

PLACE STICKER AT TOP OF ENVELOPE TO THE RIGHT
OF THE RETURN ADDRESS, FOLD AT DOTTED LINE
CERTIFIED MAIL™



7005 1820 0007 5551 9120

Moore & Van Allen

Moore & Van Allen PLLC
Suite 4700
100 North Tryon Street
Charlotte, NC 28202-4003

ROAM Data, Inc.
c/o Mr. Jacques Guerin
Chief Executive Officer
Ingenico Inc.
3025 Windward Plaza, Suite 600
Alpharetta, GA 30005

8932/034075 000015

FIRST CLASS MAIL

FIRST-CLASS

DATA FAC



US POSTAGE \$07.
AUG 07
ZIP 0801 105

AC 1360878



August 22, 2018

Via Over Night Delivery

David Szczepanski, COO, U.S.
Ingenico Group Mobile Solutions
101 Federal Street, Suite 700
Boston, MA 02110

Re: Request for Indemnification | Blackbird Technologies

Dear Mr. Szczepanski:

Total Merchant Services, Inc. ("TMS") and Roam Data, Inc. ("Roam Data") are parties to the Roam Data Mobile Commerce Solutions Reseller Agreement, effective date September 1, 2010, and subsequent amendments (collectively, the "TMS Reseller Agreement"). North American Bancard, LLC ("NAB") and Roam Data are parties to the Roam Data Reseller Agreement, effective date December 4, 2010 (the "NAB Reseller Agreement"). It is our understanding that Ingenico Group Mobile Solutions ("Ingenico") acquired Roam Data, and through that acquisition now stands in the shoes of Roam Data for purposes of the TMS Reseller Agreement and the NAB Reseller Agreement.

TMS and its parent NAB have received correspondence from Blackbird Technologies ("Blackbird"). Blackbird alleges that the Payment Jack audio jack-based card reader products and associated services that TMS and NAB acquire from Ingenico infringe a Blackbird patent. Please find enclosed correspondence received from Blackbird.

In accordance with Article 9 of the TMS Reseller Agreement, TMS hereby tenders defense of TMS to Ingenico and requests that Ingenico indemnify TMS and hold TMS harmless from any and all costs and liabilities associated with accusations of infringement by Blackbird and any future claims brought by Blackbird in court. This tender is made pursuant to Article 9.1(a) of the TMS Reseller Agreement, which provides in pertinent part "Roam Data shall indemnify RESELLER against any direct damages and reasonable legal fees and expenses" arising from any third party intellectual property claim.

In accordance with Section 6 of the NAB Reseller Agreement, NAB hereby tenders defense of NAB to Ingenico and requests that Ingenico indemnify NAB and hold NAB harmless from any and all costs and liabilities associated with accusations of infringement by Blackbird and any future claims brought by Blackbird in court. This tender is made pursuant to Section 6.1 of the NAB Reseller Agreement, which provides in pertinent part, "Roam Data hereby indemnifies and holds harmless RESELLER from and against any claims, actions, or demands alleging that ROAM MCR infringe any patent . . . of any third party."



I look forward to your written acknowledgement and acceptance of the tender of the defense of this infringement claim. I am also available to speak with you regarding this matter at your earliest convenience.

Respectfully,

A handwritten signature in blue ink, appearing to read "R. S. Smith".

Robert S. Smith
General Counsel
North American Bancard, LLC
250 Stephenson Hwy Troy, MI 48083
P: 248.269-6000 x5345 · F: 248.283.6001
Email: rsmith@nabancard.com



BY E-MAIL AND INTERNATIONAL COURIER

October 23, 2018

BBPOS Group
Room 1903-04, 19/F, Tower 2, Nina Tower
8 Yeung Uk Road, Tsuen Wan
New Territories
Hong Kong

Attention: Alex Choi, President and Chief Executive Officer
Ben Lo, Chairman and Co-Founder

Re: Lawsuit by IOEngine, LLC relating to Card-Reader

Gentlemen:

I write to follow up regarding my May 7, 2018 letter concerning the Engineering License Agreement made as of May 4, 2010, amended on August 15, 2011 (the "Agreement"), between BBPOS Limited ("BBPOS") and Ingenico Inc., successor by merger to ROAM Data, Inc. ("Ingenico").

In that letter, Ingenico notified you of BBPOS's duty to indemnify and hold harmless Ingenico pursuant to Section 3.18 of the Agreement, and pursuant to the representations and warranties BBPOS made in Sections 3.9 and 3.10 of the Agreement, in connection with IOEngine, LLC's lawsuit against PayPal Holdings, Inc. ("PayPal") alleging that card reader products for mobile payments sold by PayPal, some of which are manufactured for Ingenico by BBPOS, infringe U.S. Patent Nos. 8,539,047, 9,059,969 and 9,774,703.

Since that date, BBPOS has ignored the request in Ingenico's letter that BBPOS acknowledge its duties and responsibilities under the Agreement, specifically its obligation to indemnify and hold harmless Ingenico.

Ingenico interprets BBPOS's silence and refusal to give Ingenico the assurances it has requested as (i) BBPOS's acceptance of Ingenico's position that BBPOS owes Ingenico a duty to indemnify and hold harmless Ingenico in connection with the IOEngine matter; and (ii) BBPOS's acceptance and assent to Ingenico proceeding with the defense and settlement of the IOEngine matter at BBPOS's cost and expense.

Effective immediately, Ingenico will submit Sunstein Kann Murphy & Timbers LLP's invoices for legal services relating to the IOEngine matter to BBPOS for payment. Ingenico's counsel will keep BBPOS reasonably informed of the progress of the IOEngine matter and inform BBPOS prior to the completion of any settlement.

Ingenico reserves all rights with respect to the Agreement.

Very truly yours,

A handwritten signature in dark ink, appearing to read "Ward D. Hewins", with a long, sweeping horizontal line extending to the right.

Ward D. Hewins
Vice President & General Counsel
Ingenico North America

cc: *Kerry L. Timbers, Esq. (via e-mail only)*



BY E-MAIL AND INTERNATIONAL COURIER

October 26, 2018

BBPOS Group
Room 1903-04, 19/F, Tower 2, Nina Tower
8 Yeung Uk Road, Tsuen Wan
New Territories
Hong Kong

Attention: Alex Choi, President and Chief Executive Officer
Ben Lo, Chairman and Co-Founder

Re: Letters from REM Holdings 3, LLC relating to Audio Jack Card-Reader Patents

Gentlemen:

I write to update my letter to you of January 19, 2017, which cited the Engineering License Agreement made as of May 4, 2010, amended on August 15, 2011 (the "Agreement"), between BBPOS Limited ("BBPOS") and Ingenico Inc., successor by merger to ROAM Data, Inc. ("Ingenico"). In my earlier letter, I notified you that REM Holdings 3, LLC ("REM") had sent a letter to Comerica Inc. alleging that it is likely that a card reader device sold by Comerica infringes one or both of U.S. Patent Nos. 9,218,517 (the "'517 patent") and 7,896,248.

The card reader device referenced in REM's letter to Comerica is provided to Ingenico by BBPOS pursuant to the Agreement. I asked you in my letter of January 19, 2017 (and in my follow-up letter of February 28, 2017) to acknowledge BBPOS's duty to indemnify and hold harmless Ingenico pursuant to Section 3.18 of the Agreement, and pursuant to the representations and warranties made in Sections 3.9 and 3.10 of the Agreement.

Since my earlier correspondence to you, Ingenico has been notified that REM has sent letters to the following companies that have provided card reader devices to their customers, in each case alleging infringement of the '517 patent and U.S. Patent No. 9,747,474 or offering to discuss the licensing of REM patents: Capital One, N.A.; Elavon, Inc.; Total System Services, Inc.; PayPal, Inc.; and Total Merchant Services, Inc. and its parent, North American Bancard, LLC ("NAB"). Copies of REM's letters to Capital One, N.A., Elavon, Inc., Total System Services, Inc., PayPal, Inc. and Total Merchant Services, Inc., minus their attachments, are enclosed as is a copy of a letter from NAB to Ingenico seeking defense and indemnification with respect to the letter Total Merchant Services and NAB received from REM.

The devices referenced in these additional letters from REM and NAB are sold to Ingenico by BBPOS pursuant to the Agreement. Ingenico hereby notifies you of BBPOS's duty to indemnify and hold harmless Ingenico in each of these cases pursuant to Section 3.18 of the Agreement, and pursuant to the representations and warranties made by BBPOS in Sections 3.9 and 3.10 of the Agreement.

Please contact Ingenico's outside counsel to confirm that BBPOS acknowledges its duties and responsibilities with respect to these matters, and so our attorney can discuss the Capital One, N.A., Bank

of America Merchant Services, LLC, Elavon, Inc., and Total Merchant Services, Inc./NAB matters with you further. Our outside counsel is:

Kerry Timbers
Sunstein Kann Murphy & Timbers LLP
125 Summer Street
Boston, MA 02110-1618
(617) 443-9292
ktimbers@sunsteinlaw.com

Ingenico reserves all rights with respect to the Agreement.

Very truly yours,



Ward D. Hewins
Vice President & General Counsel
Ingenico North America

Enclosures

cc: Kerry L. Timbers, Esq. (via e-mail only)



Christopher S. Stewart
2101 Cedar Springs Road, Suite 1000
Dallas Texas 75201
Telephone: (214) 888 -4846
cstewart@caldwellcc.com

October 5, 2017

VIA CERTIFIED MAIL

Mr. John G. Finnegan, Jr.
General Counsel
Capital One, N.A. and Capital One Financial Corporation
1680 Capital One Drive
McLean, VA 22102

RECEIVED TE
OCT 12 2017 10/16/17
LEGAL DEPT
RICHMOND VA
10/18/17
NKH

RE: *Infringement of U.S. Patents 9,218,517 and 9,747,474*

Mr. Finnegan:

My firm represents REM Holdings 3, LLC, a company in St. Louis, Missouri principally owned by Dr. Robert E. Morley, Jr. Dr. Morley is a professor of engineering at Washington University in St. Louis, an early contributor to mobile payments company Square, Inc., and the inventor of several patents and patent applications covering headphone jack card reader devices and related methods. By way of example, Dr. Morley is the sole inventor of U.S. Patent No. 9,218,517, which is entitled "Card Reader Device and Method of Use" and assigned to REM Holdings 3, LLC. Dr. Morley is also the sole inventor of U.S. Patent No. 9,747,474, as well as other patents and patent applications pending with the Patent Office and in other jurisdictions. You can find a full listing of Dr. Morley's patents for free on the Patent Office website.

Dr. Morley's patented technology revolutionized the mobile payments industry by providing a cheap and effective option for accepting credit card payments on a smart phone or tablet at a time when no comparable options existed. As you are likely aware, the patents originated out of Dr. Morley's early involvement with Square, Inc. See <https://squareup.com/news/statement-on-resolved-litigation>. Since Square's and Dr. Morley's initial introduction of the technology, a number of companies have introduced competing offerings that infringe Dr. Morley's intellectual property.

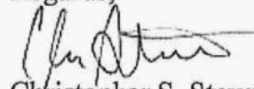
Capital One has, for many years, been offering its customers card reader devices that employ the headphone jack on a cell phone to process credit card payments through its Spark Pay service. With the Spark Pay Mobile Reader and associated service (and any similar headphone jack card reader products Capital One offers its customers), Capital One performs various acts of unauthorized infringement of the '517 and '474 patents. Our records do not show that Capital One or Spark Pay made any attempt to secure Dr. Morley's authorization to use his technology. If we are mistaken, please provide a copy of that request.

J. Finnegan
October 5, 2017
Page 2

The claims of Dr. Morley's patents define his patent property rights, but generally, the patents cover magnetic stripe card readers that contain a housing with a slot for a credit card, a read head, a TRS output plug, and either a passive resistor or an internal processing element (powered by a battery or via an audio signal from the TRS plug) within the housing. For your convenience, the full text of some exemplary claims of the '517 Patent (with the modifications noted in a certificate of correction) is set out below as Exhibit A. The card readers mentioned above employ the headphone jack, accept magnetic stripe cards, contain a housing, contain an integrated circuit for processing credit card data that appears to receive power from audio signals, and meet a number of other elements of the dependent claims, thus infringing several claims of Dr. Morley's patents. For your reference, the '517 and '474 patents are included with this letter.

Even though Capital One did not seek authorization for using Dr. Morley's technology before doing so, we are still prepared to discuss terms for licensing Capital One's infringement of Dr. Morley's patents. Please let us know if you are willing to talk with us. We would be happy to answer any questions you might have.

Regards,



Christopher S. Stewart



Christopher S. Stewart
2101 Cedar Springs Road, Suite 1000
Dallas Texas 75201
Telephone: (214) 888 -4846
cstewart@caldwellcc.com

July 5, 2017

VIA CERTIFIED MAIL

Mindy Doster
General Counsel
Elavon, Inc.
Two Concourse Parkway, Suite 800
Atlanta, GA 30328

RE: Infringement of U.S. Patents 7,896,248; 9,218,517; and related pending applications

Ms. Doster:

My firm represents REM Holdings 3, LLC, a company in St. Louis, Missouri principally owned by Dr. Robert E. Morley, Jr. As I explained when I previously reached out to you by letter on March 17, 2017, Dr. Morley is a professor of engineering at Washington University in St. Louis, an early contributor to mobile payments company Square, Inc., and the inventor of several patents and patent applications covering headphone jack card reader devices and related methods. By way of example, Dr. Morley is the sole inventor of U.S. Patent No. 9,218,517, which is entitled "Card Reader Device and Method of Use" and assigned to REM Holdings 3, LLC. Dr. Morley is also the inventor of U.S. Patent No. 7,896,248 (also assigned to REM Holdings 3, LLC), and he has other patent applications pending with the Patent Office and in other jurisdictions, including U.S. 13/585,979. You can find a full listing of Dr. Morley's patents for free on the Patent Office website.

Dr. Morley's patented technology revolutionized the mobile payments industry by providing a cheap and effective option for accepting credit card payments on a smart phone or tablet at a time when no comparable options existed. As you are likely aware, the patents originated out of Dr. Morley's early involvement with Square, Inc. See <https://squareup.com/news/statement-on-resolved-litigation>. Since Square's and Dr. Morley's initial introduction of the technology, a number of companies have introduced competing offerings that infringe Dr. Morley's intellectual property.

It has come to our attention that Elavon offers its customers a card reader device that employs the headphone jack on a cell phone to process credit card payments, at least with its Converge Mobile offering. With that card reader and associated service (and any similar products of which we are unaware from public information), Elavon performs various acts of unauthorized infringement of the '517 and '248 patents, and will infringe claims of the pending applications

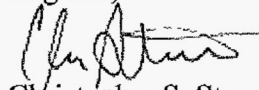
M. Doster
July 5, 2017
Page 2

once the issue as patents. Our records do not show that Elavon made any attempt to secure Dr. Morley's authorization to use his technology. If we are mistaken, please provide a copy of that request.

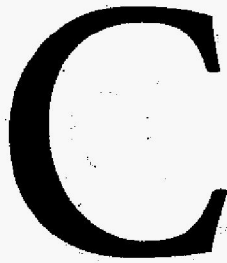
The claims of Dr. Morley's patents define his patent property rights, but generally, the patents cover magnetic stripe card readers that contain a housing with a slot for a credit card, a read head, a TRS output plug, and either a passive resistor or an internal processing element (powered by a battery or via an audio output from the TRS plug) within the housing. For your convenience, the full text of some exemplary claims of the '517 Patent (with the modifications noted in the certificate of correction) is set out below as Exhibit A, and I have attached copies of the '517 Patent, '248 Patent, and '979 Application. The Converge Mobile card reader employs the headphone jack, accepts magnetic stripe cards, contains a housing, battery, and a number of other elements of the dependent claims of the patents, and appears to contain an integrated circuit for processing the credit card data within the reader, thus infringing several claims of Dr. Morley's patents. To the extent the Converge Mobile card reader draws power from a cell phone's audio output, it would infringe additional claims. It should be a simple matter for Elavon to evaluate and confirm the extent of its infringement of Dr. Morley's patents.

Even though Elavon did not seek authorization for using Dr. Morley's technology before doing so, we are still prepared to discuss terms for licensing Elavon's past infringement of Dr. Morley's patents. Please let us know if you are willing to talk with us. We would be happy to answer any questions you might have.

Regards,



Christopher S. Stewart



CALDWELL
CASSADY
CURRY

Christopher S. Stewart
2101 Cedar Springs Road, Suite 1000
Dallas Texas 75201
Telephone: (214) 888 -4846
cstewart@caldwellcc.com

March 17, 2017

VIA CERTIFIED MAIL

G. Sanders Griffith III
General Counsel
Total System Services, Inc.
P.O. Box 2567
Columbus, GA 31902

RE: *REM Holdings 3, LLC Patents Relating to Headphone Jack Card Readers*

Mr. Griffith:

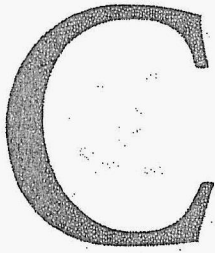
My firm represents REM Holdings 3, LLC, a company in St. Louis, Missouri principally owned by Dr. Robert E. Morley, Jr. Dr. Morley is a professor of engineering at Washington University in St. Louis, and an early contributor to mobile payments company Square, Inc.

I would like to arrange a time to discuss with you a licensing opportunity that should be of interest to TSYS. To facilitate that discussion, I have attached a draft Non-Disclosure Agreement that preserves the status quo between the parties and protects both parties' confidential information that may be exchanged as part of our talks.

Please let us know if you are willing to talk with us. And if so, please sign the NDA and return to me by email, and I will arrange for Dr. Morley to do the same. I would be happy to answer any questions you might have.

Regards,

Christopher S. Stewart



CALDWELL
CASSADY
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Christopher S. Stewart
2101 Cedar Springs Road, Suite 1000
Dallas Texas 75201
Telephone: (214) 888 -4846
cstewart@caldwellcc.com

October 5, 2017

VIA CERTIFIED MAIL

Ms. Louise Pentland
Chief Business Affairs and Legal Officer
Paypal Inc.
12312 Port Grace Boulevard
La Vista, NE 68128

RE: *Infringement of U.S. Patents 9,218,517 and 9,747,474*

Ms. Pentland:

My firm represents REM Holdings 3, LLC, a company in St. Louis, Missouri principally owned by Dr. Robert E. Morley, Jr. As you may recall from Matt Zises's discussions with REM in late 2009, Dr. Morley is a professor of engineering at Washington University in St. Louis, an early contributor to mobile payments company Square, Inc., and the inventor of several patents and patent applications covering headphone jack card reader devices and related methods. By way of example, Dr. Morley is the sole inventor of U.S. Patent No. 9,218,517, which is entitled "Card Reader Device and Method of Use" and assigned to REM Holdings 3, LLC. Dr. Morley is also the inventor of U.S. Patent No. 9,747,474, as well as other patents and patent applications pending with the Patent Office and in other jurisdictions. You can find a full listing of Dr. Morley's patents for free on the Patent Office website.

Dr. Morley's patented technology revolutionized the mobile payments industry by providing a cheap and effective option for accepting credit card payments on a smart phone or tablet at a time when no comparable options existed. As you are likely aware, the patents originated out of Dr. Morley's early involvement with Square, Inc. See <https://squareup.com/news/statement-on-resolved-litigation>. Since Square's and Dr. Morley's initial introduction of the technology, a number of companies have introduced competing offerings that infringe Dr. Morley's intellectual property.

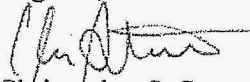
Paypal has, for many years, been offering its customers a card reader device through its Paypal Here service that employs the headphone jack on a cell phone to process credit card payments. With that Mobile Card Reader and associated service (and any similar headphone jack readers), Paypal performs various acts of unauthorized infringement of the '517 and '474 patents. Our records do not show that Paypal made any attempt to secure Dr. Morley's authorization to use his technology. If we are mistaken, please provide a copy of that request.

L. Pentland
October 5, 2017
Page 2

The claims of Dr. Morley's patents define his patent property rights, but generally, the patents cover magnetic stripe card readers that contain a housing with a slot for a credit card, a read head, a TRS output plug, and either a passive resistor or an internal processing element (powered by a battery or via an audio signal from the TRS plug) within the housing. For your convenience, the full text of some exemplary claims of the '517 Patent (with the modifications noted in the certificate of correction) is set out below as Exhibit A. The Paypal Here Mobile Card Reader employs the headphone jack, accepts magnetic stripe cards, contains a housing, an integrated circuit for processing credit card data that receives power via an audio signal in the headset jack, and a number of other elements of the dependent claims of the patents, thus infringing several claims of Dr. Morley's patents. For your reference, the '517 and '474 patents are included with this letter.

Even though Paypal did not seek authorization for using Dr. Morley's technology before doing so, we are still prepared to discuss terms for licensing Paypal's infringement of Dr. Morley's patents. Please let us know if you are willing to talk with us. We would be happy to answer any questions you might have.

Regards,

A handwritten signature in black ink, appearing to read 'Chris Stewart', written over a horizontal line.

Christopher S. Stewart

L. Pentland
October 5, 2017
Page 3

Exhibit A: Exemplary Claims of the '517 Patent:

14. A method, comprising:

receiving, by a host system, from a particular mobile host device information from which a particular account number can be determined, with the particular account number having been acquired from a magnetic stripe of a particular card by a card reader device;

wherein the card reader device, comprises: a read head configured to read data, including a representation of an account number, stored on a magnetic stripe of a card, and to produce an analog signal indicative of said data stored on the magnetic stripe of the card; an integrated circuit device configured to receive an input signal based on the analog signal and to produce a second signal, including a representation from which the account number can be extracted; and a TRS (tip, ring(s), sleeve) output plug, adapted to be inserted into a standard headset jack associated with a mobile host device, and configured to convey an output signal based on the second signal to the mobile host device via a microphone contact of the TRS (tip, ring(s), sleeve) output plug to a microphone input contact of the standard headset jack to audio input circuitry within the mobile host device; wherein the card reader device is configured to provide all electrical connections with the mobile host device via the TRS (tip, ring(s), sleeve) output plug; and

authorizing, by the host system, a particular transaction corresponding to the particular account number.

30. A card reader device, comprising:

a housing, comprising a slot and circuitry including a processing element, with the card reader device configured to read data stored on a magnetic stripe of a card being swiped by a read head of the card reader device using the slot in order to generate an output signal indicative of said data stored on the magnetic stripe using the processing element; and

a TRS (tip, ring(s), sleeve) output plug, coupled to and extending from the housing, adapted to be inserted into a standard headset jack associated with a mobile host device, and configured to convey the output signal to the mobile host device via a microphone contact of the TRS (tip, ring(s), sleeve) output plug to a microphone input contact of the standard headset jack to audio input circuitry within the mobile host device; wherein the card reader device is configured to provide all electrical connections with the mobile host device via the TRS (tip, ring(s), sleeve) output plug.

31. The card reader device of claim 30, wherein said housing includes a battery; and wherein said circuitry includes an integrated circuit powered by the battery.

32. The card reader device of claim 30, wherein the TRS (tip, ring(s), sleeve) output plug includes one or more audio contacts for coupling with one or more audio outputs associated with the mobile host device for providing power to the card reader device; and wherein an audio output is a signal produced by audio output circuitry of the mobile host device with the card reader device being configured to rectify and low pass filter each of said one or more audio outputs to produce said power.



August 22, 2018

Via Over Night Delivery

David Szczepanski, COO, U.S.
Ingenico Group Mobile Solutions
101 Federal Street, Suite 700
Boston, MA 02110

Re: Request for Indemnification | REM Holdings 3, LLC

Dear Mr. Szczepanski:

Total Merchant Services, Inc. ("TMS") and Roam Data, Inc. ("Roam Data") are parties to the Roam Data Mobile Commerce Solutions Reseller Agreement, effective date September 1, 2010, and subsequent amendments (collectively, the "TMS Reseller Agreement"). North American Bancard, LLC ("NAB") and Roam Data are parties to the Roam Data Reseller Agreement, effective date December 4, 2010 (the "NAB Reseller Agreement"). It is our understanding that Ingenico Group Mobile Solutions ("Ingenico") acquired Roam Data, and through that acquisition now stands in the shoes of Roam Data for purposes of the TMS Reseller Agreement and the NAB Reseller Agreement.

TMS and its parent NAB have received correspondence from REM Holdings, 3, LLC ("REM"). REM alleges that the Roam Data audio-jack based card reader products, which TMS and NAB acquire from Ingenico, infringe two of REM's patents. Please find enclosed correspondence received from REM, which includes a claim chart alleging infringement.

In accordance with Article 9 of the TMS Reseller Agreement, TMS hereby tenders defense of TMS to Ingenico and requests that Ingenico indemnify TMS and hold TMS harmless from any and all costs and liabilities associated with accusations of infringement by REM and any future claims brought by REM in court. This tender is made pursuant to Article 9.1(a) of the TMS Reseller Agreement, which provides in pertinent part "Roam Data shall indemnify RESELLER against any direct damages and reasonable legal fees and expenses" arising from any third party intellectual property claim.

In accordance with Section 6 of the NAB Reseller Agreement, NAB hereby tenders defense of NAB to Ingenico and requests that Ingenico indemnify NAB and hold NAB harmless from any and all costs and liabilities associated with accusations of infringement by REM and any future claims brought by REM in court. This tender is made pursuant to Section 6.1 of the NAB Reseller Agreement, which provides in pertinent part, "Roam Data hereby indemnifies and holds harmless RESELLER from and against any claims, actions, or demands alleging that ROAM MCR infringe any patent . . . of any third party."

250 Stephenson Highway • Troy, Michigan 48083
1-800-BANCARD • (248) 269-6000 • www.nabancard.com



I look forward to your written acknowledgement and acceptance of the tender of the defense of this infringement claim. I am also available to speak with you regarding this matter at your earliest convenience.

Respectfully,

A handwritten signature in black ink, appearing to read "RSS", with a long horizontal stroke extending to the right.

Robert S. Smith
General Counsel
North American Bancard, LLC
250 Stephenson Hwy Troy, MI 48083
P: 248.269-6000 x5345 F: 248.283.6001
Email: rsmith@nabancard.com